

Federal Communications Commission

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DA 18-236

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OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON GOOGLE'S REQUEST FOR WAIVER OF SECTION 15.255(c)(3) OF THE COMMISSION'S RULES FOR RADARS USED FOR INTERACTIVE MOTION SENSING IN THE 57-64 GHz BAND

ET Docket No. 18-70

Comment Date: April 11, 2018

Reply Comment Date: April 23, 2018

On March 7, 2018, Google LLC (Google) filed a request for waiver of Section 15.255(c)(3) of the Commission's rules to allow the marketing and certification of interactive motion sensing technology it has developed under its Project Soli that can be used to enable touchless control of device functions and features. The sensing technology operates in the 57-64 GHz frequency band. Google seeks to operate consistent with the power levels allowed in Draft European Standard Institute (ETSI) EN 305 550 V2.1.0 (Oct 2017), which are higher than those permitted by the Commission's rules. The Commission's Office of Engineering and Technology (OET) seeks comment on this request.

Google states that the requested higher signal powers will allow its Project Soli sensors to recognize gestures when a user's hand is farther from a device. Google explains that the higher power would make the feature more convenient, intuitive, and useful for consumers. Google further states that its devices could be particularly meaningful for users with mobility, speech, or tactile impairments.

Section 15.255(c)(3) of the Commission's rules requires short-range devices for interactive motion sensing to comply with a peak transmitter conducted output power limit of -10 dBm and a peak

equivalent isotropically radiated power (EIRP) limit of +10 dBm. Google is requesting to operate its Project Soli device at the ETSI limits of +10 dBm transmitter conducted output power, +20 dBm mean EIRP level, and +13 dBm/MHz mean power spectral density. To support its request, Google also submits a simulation study on "Assessing the Interference of Miniature Radar on Millimeter Wave 60 GHz Wi-Fi."

OET has concluded that, in order to develop a complete record on the issues presented by this request, this proceeding will be treated, for *ex parte* purposes, as "permit-but-disclose" in accordance with Section 1.1200(a) of the Commission's rules, subject to the requirements under Section 1.1206(b).

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each
 filing. If more than one docket or rulemaking number appears in the caption of this proceeding,
 filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.

U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th
 Street, SW, Washington DC 20554.

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Parties should also send a copy of their filings to Anh Wride, Office of Engineering and Technology, Federal Communications Commission, Room 7-A162, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to anh.wride@fcc.gov.

Documents are available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554.

Office of Engineering and Technology contact: Anh Wride at 202-418-0577.

By the Chief, Office of Engineering and Technology

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